



**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-35 (CANCELLED)

36. (CURRENTLY AMENDED) A linearizer comprising an adaptation controller with M monitor signals input thereto and M control settings output therefrom, wherein the adaptation controller is operable for determining first ~~determines~~ M uncorrelated adjustment settings dependent on the M monitor signals using an inverted signal correlation matrix having components of measured pairwise bandpass correlations between the M monitor signals, and then adjusts the M control settings using the M uncorrelated adjustment settings.

37. (CURRENTLY AMENDED) An amplifier comprising:  
a signal cancellation circuit; and  
a distortion cancellation circuit;  
wherein a least one of the signal and distortion cancellation circuits comprises an adaptation controller with M monitor signals input thereto and M control settings output therefrom, and wherein the adaptation controller is operable for determining first ~~determines~~ M uncorrelated adjustment settings dependent on the M monitor signals using an inverted signal correlation matrix having components of measured pairwise bandpass correlations between the M

monitor signals, and for adjusting ~~then adjusts~~ the M control settings using the M uncorrelated adjustment settings.

38. (CURRENTLY AMENDED) A method for linearizing an amplifier having an adaptation controller with M monitor signals input thereto and M control settings output therefrom, said method comprising the steps of:

determining M uncorrelated adjustment settings dependent on the M monitor signals using an inverted signal correlation matrix having components of measure pairwise bandpass correlations between the M monitor signals; and

adjusting the M control settings using the M uncorrelated adjustment settings.